

# In Harm's Way

## Suicide in America

Suicide is a tragic and potentially preventable public health problem. In 1997, suicide was the 8th leading cause of death in the U.S.<sup>1</sup> Specifically, 10.6 out of every 100,000 persons died by suicide. The total number of suicides was approximately 31,000, or 1.3 percent of all deaths.

Approximately 500,000 people received emergency room treatment as a result of attempted suicide in 1996.<sup>2</sup> Taken together, the numbers of suicide deaths and attempts show the need for carefully designed prevention efforts.

Suicidal behavior is complex. Some risk factors vary with age, gender and ethnic group and may even change over time. The risk factors for suicide frequently occur in combination. Research has shown that more than 90 percent of people who kill themselves have depression or another diagnosable mental or substance abuse disorder.<sup>3</sup> In addition, research indicates that alterations in neurotransmitters such as serotonin are associated with the risk for suicide.<sup>4</sup> Diminished levels of this brain chemical have been found in patients with depression, impulsive disorders, a history of violent suicide attempts, and also in postmortem brains of suicide victims.



Adverse life events in combination with other risk factors such as depression may lead to suicide. However, suicide and suicidal behavior are not normal responses to stress. Many people have one or more risk factors and are not suicidal. Other risk factors include: prior suicide attempt; family history of mental disorder or substance abuse; family history of suicide; family violence, including physical or sexual abuse; firearms in the home; incarceration; and exposure to the suicidal behavior of others, including family members, peers, and even in the media.<sup>5</sup>

### Gender Differences

More than 4 times as many men than women die by suicide;<sup>1</sup> however, women report *attempting* suicide about 2 to 3 times as often as men.<sup>6</sup> Suicide by firearm is the most common method for both men and women, accounting for 58 percent of all suicides in 1997. Seventy-two percent of

all suicides were committed by white men, and 79 percent of all firearm suicides were committed by white men. The highest suicide rate was for white men over 85 years of age—65 per 100,000 persons.

### Children, Adolescents, and Young Adults

Over the last several decades, the suicide rate in young people has increased dramatically.<sup>7</sup> In 1997, suicide was the 3<sup>rd</sup> leading cause of death in 15 to 24 year olds—11.4 of every 100,000 persons—following unintentional injuries and homicide.<sup>1</sup> Suicide also was the 3<sup>rd</sup> leading cause in 10 to 14 year olds, with 303 deaths among 19,097,000 children in this age group. For adolescents aged 15 to 19, there were 1,802 suicide deaths among 19,146,000 adolescents. The gender ratio in this age group was about 4:1 (males: females). Among young people 20 to 24 years of age, there were 2,384

suicide deaths among 17,488,000 people in this age group. The gender ratio in this age range was about 6:1 (males: females).<sup>8</sup>

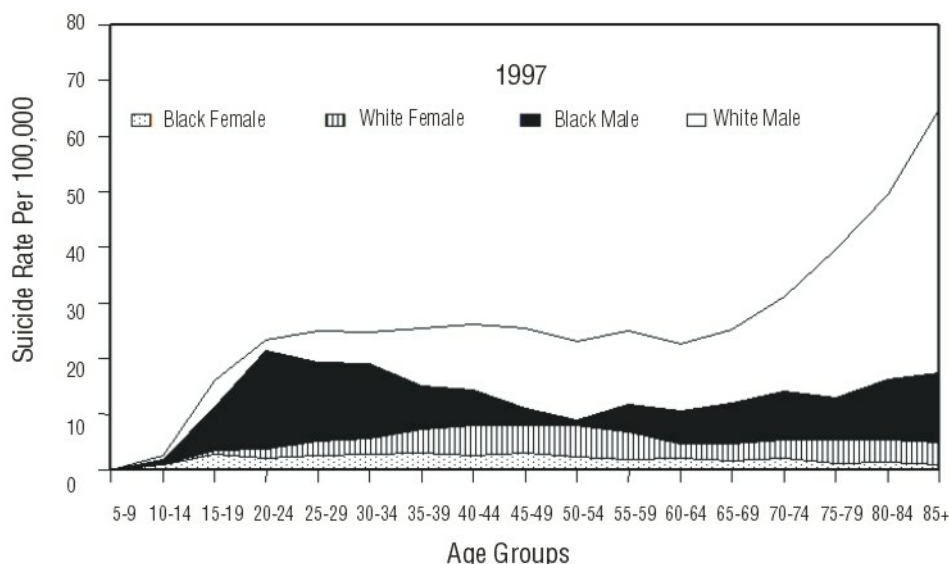
## Attempted Suicides

There may be as many as 8 attempted suicides to 1 completion;<sup>9</sup> the ratio is higher in women and youth and lower in men and the elderly. Risk factors for attempted suicide in *adults* include depression, alcohol abuse, cocaine use, and separation or divorce.<sup>10,11</sup> Risk factors for attempted suicide in *youth* include depression, alcohol or other drug use disorder, physical or sexual abuse, and aggressive or disruptive behaviors.<sup>12-14</sup> The majority of suicide attempts are expressions of extreme distress and not just harmless bids for attention. A suicidal person should not be left alone and needs immediate mental health treatment.

## Prevention

All suicide prevention programs need to be scientifically evaluated to demonstrate whether or not they work. Preventive interventions for suicide must also be complex and intensive if they are to have lasting effects. Most school-based, information-only, prevention programs focused solely on suicide have not been evaluated to see if they are effective, and research suggests that such programs may actually increase distress in the young people who are most vulnerable.<sup>15</sup> School and community prevention programs designed to address suicide and suicidal behavior as part of a broader focus on mental health, coping skills in response to stress, substance abuse, aggressive behaviors, etc., are more likely to be successful in the long run.

## U.S. Suicide Rates by Age, Gender, and Racial Group



Source: National Institute of Mental Health Data: Centers for Disease Control and Prevention, National Center for Health Statistics

Recognition and appropriate treatment of mental and substance abuse disorders also hold great suicide prevention value. For example, because most elderly suicide victims—70 percent—have visited their primary care physician in the month prior to their suicides,<sup>16</sup> improving the recognition and treatment of depression in medical settings is a promising way to prevent suicide in older adults. Toward this goal, NIMH-funded researchers are currently investigating the effectiveness of a depression education intervention delivered to primary care physicians and their elderly patients.

***If someone is suicidal, he or she must not be left alone. You may need to take emergency steps to get help, such as calling 911. It is also important to limit the person's access to firearms, large amounts of medication, or other lethal means of committing suicide.***

## For More Information

National Institute of Mental Health  
(NIMH)  
Office of Communications and Public  
Liaison  
Public Inquiries: (301) 443-4513  
Media Inquiries: (301) 443-4536  
E-mail: [nimhinfo@nih.gov](mailto:nimhinfo@nih.gov)  
Web site: <http://www.nimh.nih.gov>

American Association of Suicidology  
Phone: (202) 237-2280  
Web site: <http://www.suicidology.org>

American Foundation for Suicide  
Prevention  
Phone: (212) 363-3500  
Web site: <http://www.afsp.org>

Suicide Prevention Advocacy Network  
Phone: (770) 998-8819  
Web site: <http://www.spanusa.org>

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